# 6.1 ARCHAEOLOGICAL CLEARANCE

A cultural resources surface survey of 455 acres within and adjacent to CLL was conducted by Northland Research, Inc. in 1995. The survey was conducted to determine if cultural resources were present that may be affected by the existing landfill and proposed lateral expansion. The survey investigated approximately 307 acres of proposed landfill expansion, approximately 50 acres of 200-foot-wide buffer area surrounding the proposed expansion, and approximately 43 acres of undisturbed ground within the existing landfill fence. No sites were located during the surface survey (Northland Research, 1996). Three isolated occurrences were found during the survey and these are not considered significant and require no further protection.

The USFS and the Arizona State Historic Preservation office concurred that as an alternative to continuing the current monitoring program for new excavation activities at the site, a representative testing of specified areas for the presence of completely buried archaeological sites would be adequate for a recommendation of cultural resource provided that no cultural resources were encountered. This testing program was performed by Northland Research, Inc. in May, 1996. No buried archaeological sites or materials were encountered during this program. A letter of concurrence signed by the State Historic Preservation Officer is presented in Appendix B.

### 6.2 ZONING AND/OR SPECIAL USE PERMITS

A copy of the special use permit required by the City of Flagstaff is presented in Appendix B. See Section 5.3.3 for additional details related to zoning.

### 6.3 FLOODPLAINS

As discussed in Section 3.2 and 3.8, the existing facility and proposed lateral expansion is not located within a floodplain. Therefore, approval from the Local Floodplain Administrator is not required.

# 6.4 DRAINAGE DIVERSION

There are no significant surface water features existing within or near the landfill. Local on-site drainage may be diverted to temporary channels or dikes to prevent ponding and surface runoff from discharging into the landfilled areas. No other drainages will be altered. Therefore, approvals for alteration of existing drainages are not required.

### 6.5 WELL DRILLING REGISTRATIONS

Currently, vadose zone and LFG monitoring wells at the site are used for monitoring purposes. Therefore, well registrations from the Arizona Department of Water Resources for these wells are not required.

#### 6.6 **OPEN BURN PERMIT**

Open burning of any kind is prohibited at CLL. Therefore, an Open Burn Permit from the Department Office of Air Quality is not required.

#### 6.7 **ENDANGERED SPECIES AND PLANTS**

The Arizona Fish and Game Department was contacted by the USFS during the processing of the EA for the landfill expansion and land transfer related to endangered and special status species at the site. A copy of their response is presented in Appendix B. The Arizona Game and Fish Department have assessed that Phacelia serrata (cinder phacelia) and Penstemon clutei (Sunset Crater beardtongue), which are special status species, are present within 3 miles of the landfill site. These species occur on the existing landfill site, and the Sunset Crater beardtongue has been identified within the expansion areas. The United States Forest Service has evaluated the impact the expansion may have on all threatened, endangered, or sensitive species. Based on input from the U.S. Fish and Wildlife Service they determined that the potential loss of *Phacelia serrata* and Penstemon clutei is not considered to be a significant impact because abundant populations of the plants occur in adjacent areas. A copy of their assessment is presented in the Decision Notice and Finding of No Significant Impact included in Appendix B.

In addition, a migration route used by big game, primarily mule deer, was identified south of the existing landfill. The proposed lateral expansion, located to the north east of the existing site, will not affect this migration route.

#### 6.8 **SECTION 404 PERMIT**

As discussed in Section 3.4, there are no wetlands or surface water drainage features at or near the landfill site. Therefore, a Section 404 Permit and State 401 certification are not required.

#### 6.9 NPDES STORMWATER PERMIT

The Clean Water Act requires certain industrial facilities to obtain coverage under a National Pollutant Discharge Elimination System (NPDES) permit for discharges of storm water associated with industrial activities.

Since July 11, 1997, industries in Arizona that are subject to storm water NPDES requirements have been required to obtain coverage under the EPA Multi-Sector General Permit. Sector "L" of the Multi-Sector Permit addresses the requirements for landfills, and includes requirements for control measures and surface water quality monitoring specific to landfill operations. potential for a discharge to Waters of the United States from CLL is considered extremely improbable due to site-specific conditions and standard landfill erosion control practices. Compliance with the Multi-Sector Permit requires preparation of a storm water pollution prevention plan and documenting source controls implemented at the site to prevent contact of runoff with potential pollutants. Monitoring is likely to be limited to extremely rare events when runoff is sufficient to leave the facility property. CLL is initiating the process of meeting the requirements in Sector "L" of the Multi-Sector Permit by submitting a Notice of Intent to be covered by the permit.

Additionally, construction activities that disturb five acres or more of land must obtain coverage under a NPDES storm water permit for storm water discharges associated with construction activities. CLL will disturb more than five acres of land as a part of the proposed expansion. However, this disturbance will occur over a number of years as part of the landfill's general operation, rather than as a result of a specific construction project. Thus, CLL is considered exempt from the construction permit requirements.

### 6.10 NEW SOURCE PERFORMANCE STANDARDS (NSPS) AND EMISSION **GUIDELINES (EG)**

NSPS regulations require landfills with design capacity of greater than 2,500,000 megagrams (Mg, also referred to as metric ton) to calculate non-methane organic compound (NMOC) emission rates to determine if the 50 Mg/year limit has been reached. CLL is an existing landfill, and according to the NSPS regulations, CLL is subject to the schedule and requirements specified in the EG for MSWLFs.

In June 1997, Woodward-Clyde completed a design capacity report, including a study to estimate the NMOC emission rates for the existing landfill (Woodward-Clyde, 1997a). Landfill gas samples were collected and analyzed from 50 locations (Tier 2 sampling). The resulting NMOC emission rate is 25.8 Mg/year. The NMOC emission rate will be recalculated annually and it is anticipated that the Tier 2 sampling will be conducted again in 2002. Based on the results of the 1997 sampling, it is projected that the emission rate will be greater than 50 Mg/year in 2005, and a landfill gas collection system will be installed at that time. Additionally, a Title V permit application was prepared and submitted to ADEQ in April 1998. The facility operator commits to conducting the appropriate activities to maintain compliance with the Clean Air Act.